

[015] In one other preferred development of the invention, it is provided that in the six-gear transmission and in the seven-gear transmission the idler wheels of the highest gear G6 ~~[[of]]~~ or G7 and the idler wheels of the second highest gear G5 or G6 are located upon the one countershaft while the idler wheels of the third highest gear G5 or G5 and the idler wheels of the fourth highest gear G3 ~~[[o4]]~~ or RG are supported on the other countershaft. ❖❖

[028] In addition, with the two clutches can be associated as separate starting element 39, preferably a hydrodynamic torque converter which, by driving technique, can be incorporated in the drive train between the drive shaft of the prime mover and the input side of the clutches K1, K2. ❖❖

[030] Should it be necessary to reduce vibrations in the drive train, it is also possible to situate one torsional vibration damper 40 between the two (first and second) clutches K1, K2 and the drive shaft of the prime mover. ❖❖

[040] As can be understood from Fig. 1, a six-gear dual-clutch transmission 1 designed, according to the fundamental idea of the invention, comprises in the first place two clutches K1, 2 which are axially, consecutively disposed in this embodiment. The input side of which the two clutches K1, K2 is non-rotatably connected with a drive shaft 2 of a prime mover 41 which, as a rule, is an internal combustion engine. ❖❖

[046] The second input shaft 4 designed as a solid shaft carries the third fixed wheel 12 which meshes with the idler wheel 8 for a third gear G3 on the first countershaft 5 and with an idler wheel 15 for a fifth gear G5 on the second countershaft 6. There is further fastened on said second input shaft 4 one fourth fixed wheel 11 which drives only one idler wheel 7 for a first gear G1. ❖❖

[047] For more clarity in this representation, it is now shown that the reverse idler wheel 10 is in tooth contact with a reverse fixed wheel which is fastened upon a separate reverse gear shaft. One other reverse fixed wheel upon said reverse gear shaft RG meshes with the contact toothing 20 on the differential transmission 21. ◆

[051] The first section of this six-gear transmission 1 definably by the hollow input shaft 3 together with its fixed and idler wheels serve also for building a seven-gear dual-clutch transmission 30 without nothing having constructionally to be changed in the multiplicity of the parts collected in this area. As made clear in Fig. 2, the seven-gear dual-clutch transmission 30 actually consists to a great extent of the parts of the six-gear dual-clutch transmission 1 shown in Fig. 1 so that as a result of the great number of equal parts and thus high number of pieces good reduction in cost can be achieved in the production of both types of transmissions. ◆